

IN THE CLAIMS:

Please cancel claims 36, 37, 41, 42, 44, 45 and 49-66. Please amend claims 35, 40, 43, and 48.

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims:

1-34. (Canceled)

35. (Currently Amended): A method for identifying a candidate compound capable of binding to a polypeptide selected from the group consisting of:

~~for modulating a pain disorder, the method comprising:~~

~~i) combining a compound to be tested with a sample comprising a polypeptide selected from the group consisting of:~~

- a) a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:2, wherein the polypeptide exhibits carboxylesterase activity; and
- b) a polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:3, wherein the polypeptide exhibits carboxylesterase activity;

the method comprising:

i) combining a compound to be tested with a sample comprising a cell expressing the polypeptide under conditions suitable for binding;

- ii) assessing the ability of the compound to bind to the polypeptide; and
- iii) selecting a compound capable of binding to the polypeptide;

wherein the cell is selected from the group consisting of a brain cell, a cell derived from spinal cord, and a cell derived from dorsal root ganglion;

thereby identifying a candidate compound capable of binding to the polypeptide~~for modulating a pain disorder.~~

36. (Canceled).

37. (Canceled).

38. (Previously Presented): The method of claim 35, wherein the compound is selected from the group consisting of a small molecule, a peptide or an antibody.

39. (Previously Presented): The method of claim 35, wherein the polypeptide further comprises heterologous sequences.

40. (Currently Amended): The method of claim 35, wherein the binding of the test compound to the polypeptide is determined by a method selected from the group consisting of:

- a) direct detecting of test compound/polypeptide binding;
- b) a competition binding assay; and
- c) an immunoassay;
- ~~_____ d) a yeast two-hybrid assay; and~~
- ~~_____ e) an assay for lipid metabolism.~~

41. (Canceled).

42. (Canceled).

43. (Currently Amended): A method for identifying a candidate compound capable of binding to a polypeptide selected from the group consisting of: ~~for modulating a pain disorder, the method comprising:~~

- ~~i) combining a compound to be tested with a sample comprising a polypeptide selected from the group consisting of:~~

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:2; and
- b) a polypeptide encoded by the nucleotide sequence set forth in SEQ ID NO:1 or SEQ ID NO:3;

the method comprising:

- i) combining a compound to be tested with a sample comprising a cell expressing the polypeptide under conditions suitable for binding;
- ii) assessing the ability of the compound to bind to the polypeptide; and
- iii) selecting a compound capable of binding to the polypeptide;

wherein the cell is selected from the group consisting of a brain cell, a cell derived from spinal cord, and a cell derived from dorsal root ganglion;

thereby identifying a candidate compound capable of binding to the polypeptide~~for modulating a pain disorder.~~

44. (Canceled).

45. (Canceled).

46. (Previously Presented): The method of claim 43, wherein the compound is selected from the group consisting of a small molecule, a peptide or an antibody.

47. (Previously Presented): The method of claim 43, wherein the polypeptide further comprises heterologous sequences.

48. (Currently Amended): The method of claim 43, wherein the binding of the test compound to the polypeptide is determined by a method selected from the group consisting of:

- a) direct detecting of test compound/polypeptide binding;
- b) a competition binding assay; and
- c) an immunoassay;
- ~~———— d) ——— a yeast two-hybrid assay; and~~
- ~~———— e) ——— an assay for an assay for lipid metabolism.~~

49-66. (Canceled).